

JEFFERSON COUNTY REMEDY LANDS

SEMI-ANNUAL REPORT

WINTER, 1994

ENVIRONMENTAL RESTORATION PROGRAM

U.S. DEPARTMENT OF ENERGY
Rocky Flats Plant
Golden Colorado

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INTRODUCTION

This report summarizes activities conducted on the Jefferson County Remedy Lands during the second half of 1993 and planned activities for 1994. Revegetation activities were conducted on the Remedy Lands during the fall of 1991 and these activities were described in previous reports to Jefferson County. Activities since the previous Remedy Lands Summer 1993 Report include monitoring of the 1991 reseeding work, contracting a weed control subcontractor, and implementing weed control activities. Planned activities include continued weed control and vegetation monitoring.

In addition to requirements under the Settlement Agreement, the Department of Energy (DOE) is continuing its assessment of offsite contamination as directed by the Interagency Agreement (IAG) between the Department of Energy (DOE), Environmental Protection Agency (EPA), and Colorado Department of Health (CDH). The IAG terminology for the offsite area is Operable Unit 3 (OU3). The field work for OU3 is completed and the resulting Draft Remedial Investigation (RI) Report is scheduled for completion during the summer of 1994. The Final RI Report will be submitted in early 1995. The Jefferson County Remedy Lands are contained within OU3, and were sampled during the field work. The OU3 RI Report will include field sampling results and determine the nature and extent of contamination as well as assess the human health risk associated with the contamination. Field sampling results from the Remedy Lands will be reported to Jefferson County as the interpreted data becomes available.

SUMMARY OF MONITORING ACTIVITIES

The success of the 1991 revegetation work was evaluated during the spring and early summer of 1992. A detailed monitoring report by Dr. Sam Bamberg was included in the Remedy Lands Summer 1992 Report.

Observations on the Remedy Lands during the second half of 1993 parallel the previously reported conclusions. The success of the revegetation effort continues to be limited by weed and prairie dog problems. Weeds continue to be a problem as the vegetative cover contains a high percentage of undesirable weed species. The Prairie dog population continues to grow within the Remedy Lands.

CURRENT ACTIVITIES

As identified in past reports to Jefferson County and in Dr. Bamberg's conclusions; weedy plant species continue to compete with the desirable plant species establishment. Weed competition with desirable plant species is a severe limiting factor to successful revegetation. An aggressive weed control program has been implemented to include mechanical and chemical weed suppression.

Surveys of the Remedy Acreage indicated that in previously disturbed areas due east of the RFP east access gate, Common Mullen and Musk Thistle are the dominant noxious weeds. Weed control began in September with mowing operations. The mowing operations act to reduce the

amount of material that could disrupt or interfere with spray patterns during herbicidal application. The result of this action is that herbicide can be applied at a lower rate with more even and effective coverage. Herbicide will be applied in the spring.

The survey also indicated that in the southern portion of the Remedy Acreage, Canada Thistle was the dominant noxious weed. This area was also mowed and will require herbicide application in the spring.

These actions were performed under the control of a DOE approved Site Specific Health and Safety Plan which was developed specifically for this work, and is designed to protect the health and safety of the workers and the public.

DOE has also issued a National Environmental Policy Act (NEPA) Categorical Exclusion Determination (RFO/CX033-92) for the weed control actions as defined in Section D of 10 CFR 1021. Under this Categorical Exclusion (CX) the weed control actions are removed from further NEPA review and documentation due to the relatively benign nature of the actions.

PLANNED FUTURE ACTIVITIES

The weed control program is planned as a three year effort targeting specific weed species and their growth cycles. Mowing operations are scheduled twice each year during the growing season to inhibit natural growth cycles and seed production. Mowing will also have a stimulating growth effect on the grass species. The next mowing activity is scheduled for the April-June 1994 time frame.

Herbicide application will begin this spring with two separate applications. The first will be an application of the herbicide Escort to reduce the populations of Common Mullen, and Musk Thistle. The weeds are most vulnerable to this herbicide during the early stages of their growth cycle. The fall mowing operations will allow the herbicide to reach the small rosettes and sprouts necessary for successful weed mitigation. Herbicide application for Canada Thistle will occur during early to mid-June. These weeds need to be addressed later in their growth cycle when they are more actively growing and just before they bloom. It is expected that the herbicide Telar will be used during this application. Herbicide applications are made by tractor spraying as well as spot applications where needed. The herbicide applications are dependant on the growing conditions and target weed species. It will be determined at the time of application which herbicide will be most effective and appropriate. The EPA approved, broad spectrum herbicides, Escort, Banvel, or Telar have been approved for this project.

Previous reports to Jefferson County discussed reseeding problem areas, if necessary. Desirable plant growth production has not been as successful as hoped. But it is hoped that continued efforts at weed control will create more favorable growing conditions for the revegetated grasses. Weed control will continue to be the primary activity and will be thoroughly implemented continued before considering another reseeding effort.

As stated in earlier reports, the ability to schedule future tilling operations is limited by lack of revegetation success. The Settlement Agreement states that tilling of the alternate set of strips shall not begin until the first set is successfully reestablished in native plant species. Tilling operations will be resumed following successful revegetation of the plowed strips and evaluation of the OU3 Remedial Investigation results.